

CLAIM AMENDMENTS

1     1.     (Currently Amended) A method for managing a communications arrangement  
2           comprising a plurality of participants, the method comprising the  
3           computer-implemented steps of:  
4           assigning, to a first participant from the plurality of participants, one or more  
5           functions to be performed by the first participant;  
6           prior to a failure of the first participant that prevents the first participant from  
7           performing any of the one or more functions to be performed by the first  
8           participant,  
9           designating a second participant from the plurality of participants to  
10           perform the one or more functions if any of one or more handoff  
11           criteria are satisfied;  
12           the first participant communicating with the second participant to indicate  
13           that the second participant has been designated to perform the one  
14           or more functions if any of the one or more handoff criteria are  
15           satisfied;  
16           in response to any of the one or more handoff criteria being satisfied, assigning  
17           the one or more functions to the second participant; and  
18           selecting, based upon performance of a plurality of communications channels and  
19           at least one performance criterion, a first communications channel from  
20           the a plurality of communications channels.

1     2.     (Currently Amended) The method of Claim 1, further comprising the computer-  
2           implemented steps of:  
3           generating channel identification data that identifies the first communications  
4           channel; and  
5           providing the channel identification data over the first communications channel to  
6           one or more participants from the plurality of participants; and

7        receiving at least a first communication from the one or more participants over a  
8        second communications channel from the plurality of communications  
9        channels, wherein the second communications channel is determined  
10       based on the channel identification data.

1       3.       (Cancelled)

1       4.       (Currently Amended) A method for managing, based on performance, a  
2       communications arrangement comprising a plurality of participants, the method  
3       comprising the computer-implemented steps of:  
4       selecting, based upon performance of a plurality of communications channels, a  
5       first communications channel from the plurality of communications  
6       channels;  
7       generating channel identification data that identifies the first communications  
8       channel;  
9       providing the channel identification data to one or more participants from the  
10       plurality of participants;  
11       receiving at least a first communication from the one or more participants over a  
12       ~~second~~ the first communications channel from the plurality of  
13       communications channels, wherein the ~~second~~ first communications  
14       channel is determined based on the channel identification data;  
15       assigning, to a first participant from the plurality of participants, one or more  
16       functions to be performed by the first participant;  
17       prior to a failure of the first participant, designating a second participant from the  
18       plurality of participants to perform the one or more functions if any of one  
19       or more handoff criteria are satisfied; and  
20       wherein the plurality of communications channels correspond to a set of  
21       frequencies and the first communication received from the one or more  
22       participants is based on a hopping sequence among at least two  
23       communications channels of the plurality of communications channels,  
24       according to a frequency hopping protocol.

25 5. (Currently Amended) A method for assigning functions between participants and  
26 selecting communications channels in a communications arrangement comprising  
27 a plurality of participants, the method comprising the computer-implemented  
28 steps of:  
29 assigning, to a first participant from the plurality of participants, one or more  
30 functions to be performed by the first participant;  
31 prior to a failure of the first participant that prevents the first participant from  
32 performing any of the one or more functions to be performed by the first  
33 participant,  
34 designating a second participant from the plurality of participants to  
35 perform the one or more functions if any of one or more criteria are  
36 satisfied;  
37 the first participant communicating with the second participant to indicate  
38 that the second participant has been designated to perform the one  
39 or more functions if any of the one or more handoff criteria are  
40 satisfied;  
41 in response to any of the one or more criteria being satisfied, assigning the one or  
42 more functions to the second participant;  
43 selecting, based upon performance of a plurality of communications channels and  
44 at least one specified criterion, a first communications channel from the  
45 plurality of communications channels;  
46 generating channel identification data that identifies the first communications  
47 channel;  
48 providing the channel identification data to one or more participants from the  
49 plurality of participants; ~~and~~  
50 receiving at least a first communication from the one or more participants over a  
51 second communications channel from the plurality of communications  
52 channels, wherein the second communications channel is determined  
53 based on the channel identification data that identifies the first  
54 communications channel; and

55        wherein the plurality of communications channels correspond to a set of  
56                frequencies and the first communication received from the one or more  
57                participants is based on a hopping sequence among at least two  
58                communications channels of the plurality of communications channels,  
59                according to a frequency hopping protocol.

1        6.        (Currently Amended) The method ~~as recited in~~ of Claim 5, wherein:  
2                communications between the plurality of participants are made ~~on different~~  
3                ~~frequencies over time~~ using a frequency hopping sequence according to a  
4                frequency hopping protocol;  
5                the communications arrangement includes a wireless communications  
6                arrangement; and  
7                the plurality of participants includes a plurality of mobile devices.

1        7.        (Cancelled)

1        8.        (Currently Amended) The method of Claim 5, wherein the channel identification  
2                data is first channel identification data, and wherein the method further comprises  
3                the computer-implemented steps of:  
4                selecting, based upon the performance of the plurality of communications  
5                channels and the at least one specified criterion, a third communications  
6                channel from the plurality of communications channels;  
7                generating second channel identification data that identifies the third  
8                communications channel;  
9                providing the second channel identification data over a particular communications  
10                channel of the plurality of communications channels to one or more  
11                additional participants from the plurality of participants, wherein the  
12                particular communications channel is not the third communications  
13                channel; and

14 receiving at least a second communication from the one or more additional  
15 participants over a fourth communications channel from the plurality of  
16 communications channels, wherein the fourth communications channel is  
17 determined based on the second channel identification data that identifies  
18 the third communications channel.

1 9. (Currently Amended) The method of Claim 5, wherein the computer-  
2 implemented step of providing the channel identification data to the one or more  
3 participants further comprises the computer-implemented steps of:  
4 providing the channel identification data to the one or more participants over a  
5 third communications channel of the plurality of communications  
6 channels, wherein the third communications channel is not the first  
7 communications channel;  
8 determining the performance of the plurality of communications channels used by  
9 the plurality of participants; and  
10 wherein at least the first communication from the one or more participants  
11 includes data that indicates the performance of the third communications  
12 channel.

1 10. (Currently Amended) The method of Claim 9, wherein: ~~at least the first~~  
2 ~~communication from the one or more participants includes data that indicates the~~  
3 ~~performance of the third communications channel~~  
4 the performance of the plurality of communications channels is determined based  
5 on a channel performance testing technique selected from the group  
6 consisting of a received signal strength indicator, a header error check, a  
7 cyclic redundancy check, and forward error correction;  
8 the first communications device is a master participant;  
9 the second communications device is an associate master participant; and  
10 the one or more communications devices are slave participants.

1 11. (Currently Amended) The method of Claim 5, wherein the computer-implemented  
2 step of selecting the first communications channel from the plurality of  
3 communications channels further comprises the computer-implemented steps of:  
4 classifying one or more communications channels of the plurality of  
5 communications channels based upon whether the performance of the one  
6 or more communications channels satisfies at least one performance  
7 criterion; ~~and~~  
8 selecting the first communications channel from the one or more communications  
9 channels that are classified as satisfying the at least one performance  
10 criterion; and  
11 the method further comprises the computer-implemented steps of:  
12 determining a number of communications channels of the plurality of  
13 communications channels that satisfy the at least one performance  
14 criterion; and  
15 if the number of communications channels that satisfy the at least one  
16 performance criterion is less than a specified number, reclassifying one or  
17 more communications channels of the plurality of communications  
18 channels.

1 12. (Cancelled)

1 13. (Currently Amended) The method of Claim 5, further comprising the  
2 computer-implemented steps of:  
3 determining the performance of the plurality of communications channels by  
4 performing the computer-implemented steps of:  
5 sending a request for performance data to at least one participant of the  
6 plurality of participants;  
7 in response to the request, receiving performance data from the at least one  
8 participant; and

9                   creating and maintaining performance data that indicates the performance  
10                   of one or more communications channels of the plurality of  
11                   communications channels for communications with one or more  
12                   participants from the plurality of participants.

1    14.   (Cancelled)

1    15.   (Cancelled)

1    16.   (Cancelled)

1    17.   (Currently Amended) The method ~~as recited in~~ of Claim 5, wherein:  
2           the one or more criteria include the failure of the first participant;  
3           the first participant is a master participant that performs the steps of selecting,  
4                   generating, providing, and receiving,  
5           the second participant is a slave participant prior to being assigned to perform the  
6                   one or more functions,  
7           the second participant is an associate master participant after being designated to  
8                   perform the one or more functions if any of the one or more criteria are  
9                   satisfied, and  
10          the one or more participants include one or more slave participants.

1    18.   (Cancelled)

1    19.   (Currently Amended) The method of Claim 5, wherein:  
2           the one or more participants includes the second participant; and  
3           the second participant is designated by at least one other participant that is  
4                   selected from the group comprising (a) the first participant, (b) the first  
5                   participant and at least one other participant from the plurality of  
6                   participants, and (c) one or more participants from the plurality of  
7                   participants but not including the first participant.

1 20. (Cancelled)

1 21. (Cancelled)

1 22. (Currently Amended) A method for managing a communications system  
2 comprising a plurality of participants, comprising the computer-implemented  
3 steps of:  
4 determining the performance of a first communications channel of a plurality of  
5 communications channels between a first participant from the plurality of  
6 participants and one or more other participants from the plurality of  
7 participants; ~~and~~  
8 selecting, based upon the performance of the first communications channel  
9 between the first participant and the one or more other participants, a  
10 second participant from the one or more other participants;  
11 sending at least a first communication from the second participant over the first  
12 communications channel;  
13 assigning, to a third participant from the plurality of participants, one or more  
14 functions to be performed by the third participant; ~~and~~  
15 designating a fourth participant from the plurality of participants to perform the one or  
16 more functions if any of one or more handoff criteria are satisfied; and  
17 wherein the plurality of communications channels correspond to a set of  
18 frequencies and the first communication received from the first participant  
19 is based on a hopping sequence among at least two communications  
20 channels of the plurality of communications channels, according to a  
21 frequency hopping protocol.

1 23. (Currently Amended) The method of Claim 22, further comprising the computer-  
2 implemented step of:  
3 in response to any of the one or more handoff criteria being satisfied, assigning  
4 the one or more functions to the fourth participant;



5       wherein the one or more participants includes the fourth participant; and  
6       wherein the first participant is the same participant as the third participant.

1   24.   (Currently Amended) The method of Claim 22, wherein the computer-  
2       implemented step of designating the fourth participant is performed prior to a  
3       condition of the third participant that prevents the third participant from  
4       performing the one or more functions.

1   25.   (Currently Amended) The method of Claim 22, wherein the computer-  
2       implemented step of designating the fourth participant is performed prior to a  
3       failure of the third participant.

1   26.   (Cancelled)

1   27.   (Cancelled)

1   28.   (Currently Amended) A first communications device comprising:  
2       an interface that is configured to receive data from a plurality of communications  
3               devices and to transmit data to the plurality of communications devices;  
4               and  
5       a mechanism that is communicatively coupled to the interface and configured to:  
6               perform one or more functions;  
7               prior to a failure of the communications device that prevents the  
8               communications device from performing any of the one or more  
9               functions,  
10       designate a second communications device from the plurality of  
11               communications devices to perform the one or more  
12               functions if any of a set of criteria are satisfied;  
13       communicate with the second communications device to indicate  
14       that the second communications device has been designated  
15       to perform the one or more functions if any of the one or  
16       more handoff criteria are satisfied;

17 select, based upon performance of a plurality of communications channels,  
18 a first communications channel from the plurality of  
19 communications channels;  
20 generate first channel identification data that identifies the first  
21 communications channel;  
22 provide the first channel identification data to one or more  
23 communications devices from the plurality of communications  
24 devices; and  
25 receive at least a first communication from the one or more communications  
26 devices over a second communications channel from the plurality of  
27 communications channels, wherein the second communications  
28 channel is determined based on the first channel identification data that  
29 identifies the first communications channel; and  
30 wherein the plurality of communications channels correspond to a set of  
31 frequencies and the first communication received from the one or more  
32 communications devices is based on a hopping sequence among at least  
33 two communications channels of the plurality of communications  
34 channels, according to a frequency hopping protocol.

1 29. (Currently Amended) The first communications device ~~as recited in~~ of Claim 28,  
2 wherein:  
3 communications between the plurality of communications devices are made using a  
4 frequency hopping sequence according to a frequency hopping protocol; and  
5 the first communications device, the second communications device, and the one or  
6 more communications devices are wireless communications devices; and  
7 the plurality of communications devices includes a plurality of wireless mobile  
8 communications devices.

1 30. (Cancelled)

1 31. (Cancelled)

1 32. (Currently Amended) The first communications device of Claim 28, wherein the  
2 mechanism is further configured to:  
3 select, based upon the performance of the plurality of communications channels  
4 and at least one performance criterion, a third communications channel  
5 from the plurality of communications channels;  
6 generate second channel identification data that identifies the third communications  
7 channel;  
8 provide the second channel identification data over a particular communications  
9 channel of the plurality of communications channels to one or more additional  
10 communications devices from the plurality of communications devices,  
11 wherein the particular communications channel is not the third  
12 communications channel; and  
13 receive at least a second communication from the one or more additional  
14 communications devices over a fourth communications channel from the  
15 plurality of communications channels, wherein the fourth communications  
16 channel is determined based on the second channel identification data that  
17 identifies the third communications channel.

1 33. (Currently Amended ) The first communications device of Claim 28, wherein the  
2 mechanism is further configured to:  
3 provide the channel identification data to the one or more communications  
4 devices over a specified communications channel of the plurality of  
5 communications channels, wherein the specified communications channel  
6 is not the first communications channel;  
7 determine the performance of the plurality of communications channels used by  
8 the plurality of communications devices; and  
9 wherein at least the first communication from the one or more communications  
10 devices includes performance data that indicates the performance of the  
11 specified communications channel

1 34. (Cancelled)

1 35. (Cancelled)

1 36. (Currently Amended) The first communications device of Claim ~~35~~ 33, wherein:  
2 the performance of the plurality of communications channels is determined based  
3 on a channel performance testing technique selected from the group  
4 consisting of a received signal strength indicator, a header error check, a  
5 cyclic redundancy check, and forward error correction;  
6 the first communications device is a master participant;  
7 the second communications device is an associate master participant; and  
8 the one or more communications devices are slave participants.

1 37. (Currently Amended) The first communications device of Claim 28, wherein the  
2 mechanism is further configured to:  
3 classify one or more communications channels of the plurality of communications  
4 channels based upon whether the performance of the one or more  
5 communications channels satisfies at least one performance criterion; ~~and~~  
6 select the first communications channel from the one or more communications  
7 channels that are classified as satisfying the at least one performance  
8 criterion;  
9 determine a number of communications channels of the plurality of  
10 communications channels that satisfy the at least one performance  
11 criterion; and  
12 if the number of communications channels that satisfy the at least one  
13 performance criterion is less than a specified number, reclassify one or  
14 more communications channels of the plurality of communications  
15 channels.

1    38.    (Currently Amended) A computer-readable storage medium carrying one or more  
2           sequences of instructions for managing a communications arrangement  
3           comprising a plurality of participants, wherein execution of the one or more  
4           sequences of instructions by one or more processors causes the one or more  
5           processors to perform the steps of:  
6           assigning, to a first participant from the plurality of participants, one or more  
7           functions to be performed by the first participant;  
8           prior to a failure of the first participant that prevents the first participant from  
9           performing any of the one or more functions to be performed by the first  
10          participant,  
11          designating a second participant from the plurality of participants to  
12          perform the one or more functions if any of one or more handoff  
13          criteria are satisfied;  
14          the first participant communicating with the second participant to indicate  
15          that the second participant has been designated to perform the one  
16          or more functions if any of the one or more handoff criteria are  
17          satisfied;  
18          in response to any of the one or more handoff criteria being satisfied, assigning  
19          the one or more functions to the second participant; and  
20          selecting, based upon performance of a plurality of communications channels and  
21          at least one performance criterion, a first communications channel from  
22          ~~the~~ a plurality of communications channels.

1    39.    (Currently Amended) The computer-readable storage medium of Claim 38,  
2           further comprising instructions which, when executed by the one or more  
3           processors, cause the one or more processors to carry out the steps of:  
4           generating channel identification data that identifies the first communications  
5           channel; ~~and~~  
6           providing the channel identification data over the first communications channel to  
7           one or more participants from the plurality of participants; and

8           receiving at least a first communication from the one or more participants over a  
9           second communications channel from the plurality of communications  
10          channels, wherein the second communications channel is determined  
11          based on the channel identification data.

1    40.   (Cancelled)

1    41.   (Currently Amended) A computer-readable storage medium carrying one or more  
2       sequences of instructions for managing, based on performance, a communications  
3       arrangement comprising a plurality of participants, wherein execution of the one  
4       or more sequences of instructions by one or more processors causes the one or  
5       more processors to perform the steps of:  
6       selecting, based upon performance of a plurality of communications channels, a  
7               first communications channel from the plurality of communications  
8               channels;  
9       generating channel identification data that identifies the first communications  
10       channel;  
11       providing the channel identification data to a one or more participants from the  
12       plurality of participants;  
13       receiving at least a first communication from the one or more participants over a  
14               ~~second~~ the first communications channel from the plurality of  
15       communications channels, wherein the ~~second~~ first communications  
16       channel is determined based on the channel identification data;  
17       assigning, to a first participant from the plurality of participants, one or more  
18       functions to be performed by the first participant;  
19       prior to a failure of the first participant, designating a second participant from the  
20       plurality of participants to perform the one or more functions if any of one  
21       or more handoff criteria are satisfied; and

22       wherein the plurality of communications channels correspond to a set of  
23               frequencies and the first communication received from the one or more  
24               participants is based on a hopping sequence among at least two  
25               communications channels of the plurality of communications channels,  
26               according to a frequency hopping protocol..

1    42.   (Currently Amended) A computer-readable storage medium carrying one or more  
2       sequences of instructions for assigning functions between participants and  
3       selecting communications channels in a communications arrangement comprising  
4       a plurality of participants, wherein execution of the one or more sequences of  
5       instructions by one or more processors causes the one or more processors to  
6       perform the steps of:  
7       assigning, to a first participant from the plurality of participants, one or more  
8               functions to be performed by the first participant;  
9       prior to a failure of the first participant that prevents the first participant from  
10       performing any of the one or more functions to be performed by the first  
11       participant,  
12       designating a second participant from the plurality of participants to  
13               perform the one or more functions if any of one or more criteria are  
14               satisfied;  
15       the first participant communicating with the second participant to indicate  
16       that the second participant has been designated to perform the one  
17       or more functions if any of the one or more handoff criteria are  
18       satisfied;  
19       in response to any of the one or more criteria being satisfied, assigning the one or  
20       more functions to the second participant;  
21       selecting, based upon performance of a plurality of communications channels and  
22       at least one specified criterion, a first communications channel from the  
23       plurality of communications channels;  
24       generating channel identification data that identifies the first communications  
25       channel;

26 providing the channel identification data to a third participant from the plurality of  
27 participants; and  
28 receiving a first communication from the third participant over a second  
29 communications channel from the plurality of communications channels,  
30 wherein the second communications channel is determined based on the  
31 channel identification data that identifies the first communications  
32 channel; and  
33 wherein the plurality of communications channels correspond to a set of  
34 frequencies and the first communication received from the one or more  
35 participants is based on a hopping sequence among at least two  
36 communications channels of the plurality of communications channels,  
37 according to a frequency hopping protocol.

1 43. (Currently Amended) A computer-readable storage medium carrying one or more  
2 sequences of instructions for managing a communications system comprising a  
3 plurality of participants, wherein execution of the one or more sequences of  
4 instructions by one or more processors causes the one or more processors to  
5 perform the steps of:  
6 determining the performance of a first communications channel of a plurality of  
7 communications channels between a first participant from the plurality of  
8 participants and one or more other participants from the plurality of  
9 participants; and  
10 selecting, based upon the performance of the first communications channel  
11 between the first participant and the one or more other participants, a  
12 second participant from the one or more other participants;  
13 sending at least a first communication from the second participant over the first  
14 communications channel;  
15 assigning, to a third participant from the plurality of participants, one or more  
16 functions to be performed by the third participant; and  
17 designating a fourth participant from the plurality of participants to perform the one or  
18 more functions if any of one or more handoff criteria are satisfied; and



19       wherein the plurality of communications channels correspond to a set of  
20       frequencies and the first communication received from the first participant  
21       is based on a hopping sequence among at least two communications  
22       channels of the plurality of communications channels, according to a  
23       frequency hopping protocol.

1     44.   (New) A first communications device comprising:  
2       an interface that is configured to receive data from a plurality of communications  
3       devices and to transmit data to the plurality of communications devices; and  
4       a mechanism that is communicatively coupled to the interface and configured to:  
5       perform one or more functions;  
6       prior to a failure of the first communications device that prevents the first  
7       communications device from performing any of the one or more  
8       functions,  
9       designating a second communications device from the plurality of  
10       communications devices to perform the one or more  
11       functions if any of one or more handoff criteria are  
12       satisfied;  
13       communicate with the second communications device to indicate  
14       that the second communications device has been designated  
15       to perform the one or more functions if any of the one or  
16       more handoff criteria are satisfied;  
17       in response to any of the one or more handoff criteria being satisfied,  
18       assign the one or more functions to the second communications  
19       device; and  
20       select, based upon performance of a plurality of communications channels  
21       and at least one performance criterion, a first communications  
22       channel from a plurality of communications channels.

1     45.     (New) The first communications device of Claim 44, wherein the mechanism is  
2             further configured to:  
3             generate channel identification data that identifies the first communications  
4             channel;  
5             providing the channel identification data over the first communications channel to  
6             one or more communications devices from the plurality of  
7             communications devices; and  
8             receive at least a first communication from the one or more communications  
9             devices over a second communications channel from the plurality of  
10            communications channels, wherein the second communications channel is  
11            determined based on the channel identification data.

1     46.     (New) A first communications device comprising:  
2             an interface that is configured to receive data from a plurality of communications  
3             devices and to transmit data to the plurality of communications devices; and  
4             a mechanism that is communicatively coupled to the interface and configured to:  
5             select, based upon performance of a plurality of communications channels,  
6             a first communications channel from the plurality of  
7             communications channels;  
8             generate channel identification data that identifies the first  
9             communications channel;  
10            provide the channel identification data to one or more communications  
11            devices from the plurality of communications devices;  
12            receive at least a first communication from the one or more participants  
13            over the first communications channel from the plurality of  
14            communications channels, wherein the first communications  
15            channel is determined based on the channel identification data;  
16            assign, to a second communications device from the plurality of  
17            communications devices, one or more functions to be performed by  
18            the first communications device;

19 prior to a failure of the first communications device, designate a second  
20 communications device from the plurality of communications  
21 devices to perform the one or more functions if any of one or more  
22 handoff criteria are satisfied; and  
23 wherein the plurality of communications channels correspond to a set of  
24 frequencies and the first communication received from the one or  
25 more participants is based on a hopping sequence among at least  
26 two communications channels of the plurality of communications  
27 channels, according to a frequency hopping protocol.

1 47. (New) The first communications device of Claim 46, wherein:  
2 the one or more communications devices includes the second communications  
3 device; and  
4 the second communications device is designated by at least one other communications  
5 device that is selected from the group comprising (a) the first communications  
6 device, (b) the first communications device and at least one other  
7 communications device from the plurality of communications devices, and (c)  
8 one or more communications devices from the plurality of communications  
9 devices but not including the first communications device.

1 48. (New) A first communications device comprising:  
2 an interface that is configured to receive data from a plurality of communications  
3 devices and to transmit data to the plurality of communications devices; and  
4 a mechanism that is communicatively coupled to the interface and configured to:  
5 determine the performance of a first communications channel of a plurality  
6 of communications channels between the first communications  
7 device and one or more other communications devices from the  
8 plurality of communications devices;  
9 select, based upon the performance of the first communications channel  
10 between the first communications device and the one or more other  
11 communications devices, a second communications device from  
12 the one or more other communications devices;

13                    send at least a first communication from the second communications  
14                    device over the first communications channel;  
15                    assign, to a third communications device from the plurality of  
16                    communications devices, one or more functions to be performed by  
17                    the third communications device;  
18                    designating a fourth communications device from the plurality of  
19                    communications devices to perform the one or more functions if  
20                    any of one or more handoff criteria are satisfied; and  
21                    wherein the plurality of communications channels correspond to a set of  
22                    frequencies and the first communication received from the first  
23                    participant is based on a hopping sequence among at least two  
24                    communications channels of the plurality of communications  
25                    channels, according to a frequency hopping protocol.

1    49.    (New) The communications device of Claim 48, wherein the mechanism is  
2           further configured to:  
3           in response to any of the one or more handoff criteria being satisfied, assigning  
4           the one or more functions to the fourth participant;  
5           wherein the one or more participants includes the fourth participant; and  
6           wherein the first participant is the same participant as the third participant.

1    50.    (New) The communications device of Claim 48, wherein the mechanism  
2           designates the fourth participant prior to a condition of the third communications  
3           device that prevents the third communications device from performing the one or  
4           more functions.

- 1 51. (New) The communications device of Claim 48, wherein the mechanism  
2 designates the fourth communications device prior to a failure of the third  
3 communications device.
- 4 52. (New) The method of Claim 4, wherein the frequency hopping protocol is  
5 selected from the group consisting of (a) a frequency hopping protocol defined by  
6 Institute of Electrical and Electronics Engineers 802.15.1 Wireless Personal Area  
7 Network Standard, and (b) a frequency hopping protocol that conforms to a  
8 Bluetooth communications standard for transmissions over a 2.4 GHz band.
- 1 53. (New) The first communications device of Claim 28, wherein the mechanism is  
2 further configured to:  
3 determine the performance of the plurality of communications channels by  
4 performing the computer-implemented steps of:  
5 sending a request for performance data to at least one participant from the  
6 plurality of participants;  
7 in response to the request, receiving performance data from the at least one  
8 participant; and  
9 creating and maintaining performance data that indicates the performance  
10 of one or more communications channels of the plurality of  
11 communications channels for communications with one or more  
12 participants from the plurality of participants.
- 1 54. (New) The first communications device of Claim 28, wherein:  
2 the one or more criteria include the failure of the first communications device;  
3 the first communications device is a master communications device,  
4 the second communications device is a slave communications device prior to  
5 being assigned to perform the one or more functions,  
6 the second communications device is an associate master communications device  
7 after being designated to perform the one or more functions if any of the  
8 one or more criteria are satisfied, and  
9 the one or more participants include one or more slave communications devices.

1     55.     (New) The computer-readable storage medium of Claim 42, wherein:  
2             communications between the plurality of participants are made using a frequency  
3                 hopping sequence according to a frequency hopping protocol;  
4             the communications arrangement includes a wireless communications  
5                 arrangement; and  
6             the plurality of participants includes a plurality of mobile devices.

1     56.     (New) The computer-readable storage medium of Claim 42, wherein the channel  
2             identification data is first channel identification data, and wherein the computer-  
3             readable storage medium further comprises one or more sequences of instructions  
4             which, when executed by the one or more processors, causes the one or more  
5             processors to perform the steps of:  
6             selecting, based upon the performance of the plurality of communications  
7                 channels and the at least one specified criterion, a third communications  
8                 channel from the plurality of communications channels;  
9             generating second channel identification data that identifies the third  
10             communications channel;  
11            providing the second channel identification data over a particular communications  
12             channel of the plurality of communications channels to one or more  
13             additional participants from the plurality of participants, wherein the  
14             particular communications channel is not the third communications  
15             channel; and  
16            receiving at least a second communication from the one or more additional  
17             participants over a fourth communications channel from the plurality of  
18             communications channels, wherein the fourth communications channel is  
19             determined based on the second channel identification data that identifies  
20             the third communications channel.

1     57.     (New) The computer-readable storage medium of Claim 42, wherein the  
2             instructions for providing the channel identification data to the one or more  
3             participants further comprises one or more sequences of instructions which, when  
4             executed by the one or more processors, causes the one or more processors to  
5             perform the steps of:  
6             providing the channel identification data to the one or more participants over a  
7                     third communications channel of the plurality of communications  
8                     channels, wherein the third communications channel is not the first  
9                     communications channel;  
10            determining the performance of the plurality of communications channels used by  
11                     the plurality of participants; and  
12            wherein at least the first communication from the one or more participants  
13                     includes data that indicates the performance of the third communications  
14                     channel.

1     58.     (New) The computer-readable storage medium of Claim 57, wherein:  
2             the performance of the plurality of communications channels is determined based  
3                     on a channel performance testing technique selected from the group  
4                     consisting of a received signal strength indicator, a header error check, a  
5                     cyclic redundancy check, and forward error correction;  
6             the first communications device is a master participant;  
7             the second communications device is an associate master participant; and  
8             the one or more communications devices are slave participants.

1     59.     (New) The computer-readable storage medium of Claim 42, wherein the  
2             instructions for selecting the first communications channel from the plurality of  
3             communications channels further comprises one or more sequences of instructions  
4             which, when executed by the one or more processors, causes the one or more  
5             processors to perform the steps of:

6           classifying one or more communications channels of the plurality of  
7           communications channels based upon whether the performance of the one  
8           or more communications channels satisfies at least one performance  
9           criterion;  
10          selecting the first communications channel from the one or more communications  
11          channels that are classified as satisfying the at least one performance  
12          criterion; and  
13          the method further comprises the computer-implemented steps of:  
14          determining a number of communications channels of the plurality of  
15          communications channels that satisfy the at least one performance  
16          criterion; and  
17          if the number of communications channels that satisfy the at least one  
18          performance criterion is less than a specified number, reclassifying one or  
19          more communications channels of the plurality of communications  
20          channels.

1   60.   (New) The computer-readable storage medium of Claim 42, further comprising  
2          one or more sequences of instructions which, when executed by the one or more  
3          processors, causes the one or more processors to perform the steps of:  
4          determining the performance of the plurality of communications channels by  
5                  performing the computer-implemented steps of:  
6                  sending a request for performance data to at least one participant from the  
7                  plurality of participants;  
8                  in response to the request, receiving performance data from the at least one  
9                  participant; and  
10          creating and maintaining performance data that indicates the performance  
11          of one or more communications channels of the plurality of  
12          communications channels for communications with one or more  
13          participants from the plurality of participants.



- 1   61.   (New) The computer-readable storage medium of Claim 42, wherein:  
2       the one or more criteria include the failure of the first participant;  
3       the first participant is a master participant that performs the steps of selecting,  
4             generating, providing, and receiving,  
5       the second participant is a slave participant prior to being assigned to perform the  
6             one or more functions,  
7       the second participant is an associate master participant after being designated to  
8             perform the one or more functions if any of the one or more criteria are  
9             satisfied, and  
10      the one or more participants include one or more slave participants.
- 1   62.   (New) The computer-readable storage medium of Claim 42, wherein:  
2       the one or more participants includes the second participant; and  
3       the second participant is designated by at least one other participant that is  
4             selected from the group comprising (a) the first participant, (b) the first  
5             participant and at least one other participant from the plurality of  
6             participants, and (c) one or more participants from the plurality of  
7             participants but not including the first participant.
- 1   63.   (New) The computer-readable storage medium of Claim 41, wherein the  
2       frequency hopping protocol is selected from the group consisting of (a) a  
3       frequency hopping protocol defined by Institute of Electrical and Electronics  
4       Engineers 802.15.1 Wireless Personal Area Network Standard, and (b) a  
5       frequency hopping protocol that conforms to a Bluetooth communications  
6       standard for transmissions over a 2.4 GHz band.
- 1   64.   (New) The computer-readable storage medium of Claim 43, further comprising  
2       one or more sequences of instructions which, when executed by the one or more  
3       processors, causes the one or more processors to perform the steps of:  
4       in response to any of the one or more handoff criteria being satisfied, assigning  
5             the one or more functions to the fourth participant;  
6       wherein the one or more participants includes the fourth participant; and

7            wherein the first participant is the same participant as the third participant.

1    65.    (New) The computer-readable storage medium of Claim 43, wherein the step of  
2            designating the fourth participant is performed prior to a condition of the third  
3            participant that prevents the third participant from performing the one or more  
4            functions.

1    66.    (New) The computer-readable storage medium of Claim 43, wherein the step of  
2            designating the fourth participant is performed prior to a failure of the third  
3            participant.